

IN THE CLAIMS:

Please amend claim 1 as shown below, in which deleted terms are indicated with strikethrough and/or added terms are indicated with underscoring. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A method for controlling the drive of an actuator of an active vibration isolation support system that includes

an elastic body receiving a load from a vibrating body,

a liquid chamber having a wall of which at least a part is formed from the elastic body,

a movable member that moves out and back to change the capacity of the liquid chamber in a cycle, and

an actuator that receives a supply of current to generate an electromagnetic force for moving the movable member out,

the method comprising the step of:

controlling the current supplied to the actuator such that the current passing through the actuator during operation becomes zero at least when the movable member has moved back.

2 (original) The method according to Claim 1, wherein it further comprises the steps of:  
setting a large number of consecutive micro time regions in the cycle; and  
carrying out duty control of the voltage that is applied to the actuator in each of the micro time regions.

3. (previously presented) The method of claim 2, wherein the duty ratios of the micro time regions are decreased gradually from 100% such that the duty ratios of the last two micro time regions are set at 0%.

4. (previously presented) The method according to claim 2, wherein the method further comprises the step of setting a large number of duty cycles within the cycle of lift of the actuator.

5. (previously presented) The method according to claim 1 wherein the method further comprises the step of:

controlling the waveform of the lift of the actuator by controlling the current supplied to the actuator.

6. (previously presented) A method for controlling the drive of an actuator of an active vibration isolation support system that includes

an elastic body receiving a load from a vibrating body,

a liquid chamber having a wall of which at least a part is formed from the elastic body,

a movable member that moves out and back to change the capacity of the liquid chamber, a single excursion out and back by the movable member defining a movement

cycle, and

an actuator that receives a supply of current to generate an electromagnetic force for moving the movable member out, and

a sensor for sensing the position of the movable member,

the method comprising the step of:

controlling the current supplied to the actuator such that the amount of current supplied is dependent upon the position of the movable member as sensed by the sensor.

7 (previously presented) The method of claim 6 wherein the method further comprises the step of:

controlling the current supplied to the actuator so that the current passing through the actuator becomes zero at least when the movable member has moved back.

8 (previously presented). The method of claim 7, wherein the method further comprises the step of:

setting a large number of consecutive micro time regions in the movement cycle.

9 (previously presented). The method of claim 8, wherein the method further comprises the step of:

carrying out duty control of the voltage that is applied to the actuator in each of the micro time regions.

10. (previously presented) The method of claim 8, wherein the duty ratios of the micro time regions are decreased gradually from 100% such that the duty ratios of the last two micro time regions are set at 0%.

11. (previously presented) A method for controlling the drive of an actuator of an active vibration isolation support system that includes

an elastic body receiving a load from a vibrating body,

a liquid chamber having a wall of which at least a part is formed from the elastic body,

a movable member that moves out and back to change the capacity of the liquid chamber in a cycle, and

an actuator that receives a supply of current to generate an electromagnetic force for moving the movable member out,

the method comprising the steps of:

a) setting a large number of consecutive micro time regions in the cycle; and

b) carrying out duty control of the voltage that is applied to the actuator in each of the micro time regions, wherein the duty ratios of the micro time regions are decreased gradually from 100% such that the duty ratios of the last two micro time regions are set at 0%.